

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:  
YOU ME PATENT AND LAW FIRM

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PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)



Date of mailing  
(day/month/year) 13 APRIL 2005 (13.04.2005)

Applicant's or agent's file reference  
OPP043603KR

FOR FURTHER ACTION

See paragraph 2 below

International application No.  
**PCT/KR2004/003510**

International filing date (day/month/year)  
**29 DECEMBER 2004 (29.12.2004)**

Priority date(day/month/year)  
29 DECEMBER 2003 (29.12.2003)

International Patent Classification (IPC) or both national classification and IPC

**IPC7 H04L 1/18**

Applicant

**Electronics and Telecommunications Research Institute et al**

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR  
  
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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/KR2004/003510

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
 This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
 a sequence listing  
 table(s) related to the sequence listing
  - b. format of material  
 in written format  
 in computer readable form
  - c. time of filing/furnishing  
 contained in the international application as filed.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority for the purposes of search.
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/003510

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	1-12	YES
	Claims		NO
Inventive step (IS)	Claims	1-12	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-12	YES
	Claims		NO

**2. Citations and explanations:**

Reference is made to the following documents:

D1 = US06505034 A (2003.01.07)

D2 = EP1286491 A1 (2003.02.26)

**NOVELTY**

Neither D1 nor D2 teaches the steps about generating feedback message for ARQ described in the invention according to claims 1-12.

Therefore, the invention according to claims 1-12 is considered to be novel.

**INVENTIVE STEP**

The claims 1-12 relate to a method for creating feedback message for ARQ in mobile communication system.

D1 relates to adaptive ARQ feedback bandwidth allocation.

D2 reveals an ARQ scheme where data packets are transmitted from the transmitter to the receiver in first predetermined time intervals and positive(ACK) and negative(NAK) acknowledgement messages are transmitted from the receiver to the transmitter in second predetermined time intervals.

The invention is a little bit similar to either D1 or D2 in that they relate to an ARQ scheme where data packets are transmitted from the transmitter to the receiver.

The invention is different, however, from either D1 or D2 in that neither D1 nor D2 teaches the steps about generating feedback message for ARQ described in the claims.

Therefore, claims 1-12 of this invention are considered to involve an inventive step.

**INDUSTRIAL AVAILABILITY**

The subject matter of claims 1-12 fulfills the requirements of Article 33(4) PCT because it is useful.

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